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MICRON TECHNOLOGY, INC.

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

MICRON TECHNOLOGY, INC.,

Plaintiff,

v.

UNITED MICROELECTRONICS
CORPORATION, FUJIAN JINHUA
INTEGRATED CIRCUIT CO., LTD., and
DOES 1-10,

Defendants.

Case No.

**MICRON TECHNOLOGY, INC.'S
COMPLAINT**

(1) Defend Trade Secrets Act
(2) Civil RICO, 18 U.S.C. § 1962(c)
(3) Civil RICO, 18 U.S.C. § 1962(d)
(4) California Uniform Trade Secrets Act

DEMAND FOR JURY TRIAL

Plaintiff Micron Technology, Inc. ("Micron") brings this action against United Microelectronics Corporation ("UMC"), Fujian Jinhua Integrated Circuit Co., Ltd. ("Jinhua"), and Does 1-10 as follows.

NATURE OF THE ACTION

1. Micron brings this action under the Defend Trade Secrets Act, the civil provisions of the Racketeer Influenced and Corrupt Organizations Act ("RICO"), and California's Uniform Trade Secrets Act against UMC, Jinhua, and Does 1-10 for theft of Micron's trade secrets and other misconduct. The trade secrets relate to the design and manufacture of Dynamic Random Access Memory ("DRAM") integrated circuits – an industry with over \$50 billion in annual revenues worldwide.

2. Defendant UMC is a semiconductor foundry with operations centered in Taiwan, China, and Singapore. UMC's primary business is to mass produce integrated-circuit logic products based on designs and technology developed and provided by its customers. Although lacking any significant, independent intellectual property in advanced DRAM technology, UMC executed a deal with Defendant Jinhua – a start-up intending to manufacture DRAM products in Mainland China – to provide Jinhua with DRAM process technology and enable Jinhua to become a leading force in the DRAM business. How UMC could deliver such technology was a mystery until recent criminal indictments in Taiwan exposed the defendants' secret, illegal plan:

- a. Since at least the fall of 2015, UMC and the founders of Jinhua developed and set in motion a plan for UMC to recruit key personnel from Micron's Taiwanese affiliate – Micron Memory Taiwan Co., Ltd. ("MMT") – including MMT's former Site Director, Stephen Chen ("Chen");
- b. Working in concert, UMC and Jinhua conspired to induce former MMT employees to misappropriate electronic and paper files containing Micron trade secrets from MMT and to deliver those trade secrets to UMC;
- c. UMC then incorporated Micron's trade secrets into technologies that it transferred and/or plans to transfer to Jinhua to enable Jinhua to mass produce advanced DRAM products as early as 2018 – thus avoiding substantial, time-consuming and costly R&D efforts that UMC or Jinhua would have had to undertake to compete fairly.
- d. Aware that their trade secret theft was criminal, the participants in the conspiracy went to great lengths to hide and cover up their plan, including by: lying to human resources personnel when exiting Micron; lying to Taiwanese criminal investigators; using software tools to wipe electronic evidence; and even attempting to destroy or hide incriminating materials from Taiwanese criminal authorities while the authorities were in the middle of executing a search warrant at UMC.

1 The original and certified translations of the Indictment Decision of the Taiwan Taichung District
2 Prosecutor's Office, Case No. 106-Zhen-Zi Nos. 11035, 4520, 5612, and 5613 (the "Indictment")
3 are attached as Exhibits 1 and 2.

4 3. As the Indictment reflects, UMC and Jinhua orchestrated and executed one of the
5 boldest schemes of commercial espionage in recent times. Defendants stand to profit handsomely
6 from their scheme: UMC is prepared to make hundreds of millions of dollars for its purported
7 "development work," and Jinhua plans to avoid hundreds of millions of dollars in costs and the
8 many months of R&D effort that honest competition would require.

9 **THE PARTIES**

10 ***Plaintiff Micron***

11 4. Founded in 1978, Micron is a global leader in advanced semiconductor systems and
12 solutions. Micron's portfolio of high-performance memory technologies – including DRAM,
13 NAND and NOR Flash – is the basis for solid-state drives, modules, multichip packages, and other
14 system solutions. Micron's technologies enable the world's most innovative computing, consumer,
15 enterprise storage, networking, mobile, embedded, and automotive applications. Marketing its
16 products primarily to OEMs and retailers around the globe, Micron is ranked among the top five
17 semiconductor-producing companies in the world. Its common stock is traded on the NASDAQ
18 under the symbol "MU".

19 5. A Delaware corporation with its headquarters in the United States at 8000 South
20 Federal Way, Boise, Idaho 83707-0006, Micron has numerous locations in the United States and
21 around the world, including three locations in this District: (1) 2235 Iron Point Road, Folsom,
22 California 95630; (2) Tasman Technology Park, 590 Alder Drive, Milpitas, California 95035; and
23 (3) 3100 De La Cruz Blvd., Suite 300, Santa Clara, California 95054.

24 6. Micron employs over 30,000 people in eighteen countries worldwide, including
25 Taiwan, where it acquired Rexchip Electronics Corp. ("Rexchip") – previously a joint venture
26 between Elpida Memory, Inc. of Japan and Powerchip Technology Corporation. With its exclusive
27 focus on DRAM production, Rexchip – now MMT – added breadth and depth to Micron's already
28 world-class DRAM expertise. Micron is the sole owner of trade secrets in the Micron group of

1 companies. Micron in turn licenses its trade secrets to certain subsidiaries such as MMT to enable
2 their business operations.

3 ***Defendant UMC***

4 7. Defendant UMC is a global semiconductor foundry with several manufacturing
5 facilities worldwide, including in Taiwan and Mainland China. UMC has a significant sales
6 presence in the Northern District of California through its wholly-owned subsidiary UMC Group
7 (USA), located at 488 De Guigne Drive, Sunnyvale, California 94085. In its most recently filed
8 SEC Form 20-F, UMC reported inter-party sales into the United States to UMC Group (USA) of
9 approximately \$1.8 billion. UMC recently reported that 43% of its foundry sales are in North
10 America, and those sales derive primarily from the United States. UMC is publicly traded on the
11 New York Stock Exchange and the Taiwan Stock Exchange. In early 2016, UMC established the
12 so-called New Business Development (“NBD”) group at the Second Factory Area of its Fab 12A in
13 Tainan Science Park, which group was responsible for delivering DRAM technology to Jinhua.

14 ***Defendant Jinhua***

15 8. Defendant Jinhua is a limited liability company founded in Mainland China in early
16 2016 with the goal to rapidly and aggressively enter the DRAM business. Its shareholders are
17 commercial enterprises ultimately controlled by Fujian Province. With substantial government-
18 funding, Jinhua announced a \$5.65 billion investment in its first 300mm fabrication facility, known
19 in the industry as a “fab”, and broke ground on July 16, 2016. Jinhua plans to be in commercial
20 DRAM production by 2018.

21 ***Co-Conspirators Chen, Rong, Ho, and Wang***

22 9. Co-Conspirator Chen is the former Chairman of Rexchip and former Site Director
23 of MMT. Chen resigned from MMT on July 31, 2015, and officially joined UMC as a Senior Vice
24 President less than two months later. Shortly after leaving MMT, Chen began to recruit ranking
25 engineers and team leaders from MMT to UMC. Chen did so with the knowledge and intent that
26 those MMT personnel would use Micron trade secrets obtained during their time at MMT for the
27 benefit of UMC and Jinhua.

10. Co-Conspirator Leh-Tian Rong (“Rong”) is UMC’s Assistant Vice President, with oversight responsibility over four divisions and approximately sixty UMC employees. After Chen joined UMC as Senior Vice President, he assigned Rong to serve as Assistant Vice President of Project Technology Management Department 2 (“PM2”) – a critical division in UMC’s NBD group. Thereafter, Rong knowingly conspired with UMC and Chen and directed the misappropriation efforts of at least two other former MMT personnel in order to incorporate Micron’s trade secrets into the technology UMC was developing for Jinhua.

11. Co-Conspirator J.T. Ho (“Ho”) is a former Process Integration Engineering (“PIE”) Lead at MMT. Chen recruited Ho to work as a Process Integration Manager in UMC’s NBD group. Ho took MMT’s electronic files and paper records – which Taiwanese prosecutors have recognized to include Micron trade secrets – for use at UMC. Ho also took an active role in recruiting at least one other MMT employee to steal Micron trade secrets.

12. Co-Conspirator Kenny Wang (“Wang” or “KW”) is a former Process Integration/Device Section Manager at MMT. No later than January or February 2016, Ho began recruiting Wang to UMC. Wang quickly showed interest, and Ho began treating Wang as a UMC team member months before Wang had resigned from MMT. On the pretext that he would be joining his family’s business, Wang submitted a resignation letter to MMT on April 5, 2016 and asked to have April 26, 2016 be his last day. As described below, during the weeks leading up to his last day, Wang worked diligently to steal a massive amount of Micron trade secrets for use at UMC. Two days later, on April 28, 2016, Wang formally joined UMC and was assigned to the PM2 division of the New Business Development Unit.

Doe Defendants

13. Many facets of the conspiracy described herein likely remain unknown, and the complete list of Co-Conspirators likely extends beyond the individuals and entities identified here. At present, Micron is ignorant of the true names and capacities of such individuals and entities and, therefore, sues them herein under the fictitious names Does 1-10. Micron will amend its Complaint to identify and state applicable claims, as appropriate, against additional individuals or entities as relevant information becomes available through discovery.

14. Each of the Co-Conspirators referenced in this Complaint was an agent, conspirator, aider or abettor of UMC and/or Jinhua. The acts and omissions of each alleged Co-Conspirator were performed within the course and scope of that agency, conspiracy, aiding or abetting. At all relevant times, UMC and Jinhua were each acting with one or more of the Co-Conspirators pursuant to a common scheme, course of action, enterprise, or conspiracy.

15. As used in this complaint, the term “Co-Conspirators” refers collectively to the Defendants, Co-Conspirator Chen, Co-Conspirator Rong, Co-Conspirator Ho, Co-Conspirator Wang, and the Doe defendants.

JURISDICTION AND VENUE

16. This Court has subject-matter jurisdiction of this case under 28 U.S.C. §§ 1331 and 1338: it is a civil action arising under the laws of the United States – specifically 18 U.S.C. § 1836(b), 18 U.S.C. § 1962(c), and 18 U.S.C. § 1962(d). While the amount in controversy has not yet been quantified, it greatly exceeds \$75,000. Accordingly, this Court also has subject-matter jurisdiction on the basis of diversity of citizenship pursuant to 28 U.S.C. § 1332(a)(2). The Court may also exercise supplemental jurisdiction under 28 U.S.C. § 1367(a).

17. This Court has specific personal jurisdiction over UMC and Jinhua because UMC and Jinhua have committed intentional acts of trade secret misappropriation and/or concrete acts in furtherance of its conspiracy to commit trade secret misappropriation in the Northern District of California. For example, Chen and other personnel from UMC joined a recruiting delegation by Jinhua to a job fair hosted by the Chinese American Semiconductor Professional Association (“CASPA”) in October 2016 in Santa Clara, California. In the course of that job fair, representatives of UMC and Jinhua actively solicited applications from potential hires relying on aggressive development roadmaps and assurances of technical capabilities that were in fact secretly based on Micron’s stolen technology. In addition, Wang, in furtherance of the conspiracy, stored a cache of stolen Micron trade secrets in the United States, when he uploaded them onto cloud storage hosted on U.S.-based servers.

18. In addition, on information and belief, UMC continually engages in other commercial activities in the United States, whereby it purposefully avails itself of the protections of

1 U.S. law. In fact, on August 14, 2014, Micron and UMC entered into a non-disclosure agreement
2 to protect the parties' respective confidential information – none of which concerned DRAM
3 technology. In that contract, the parties expressly agreed that the agreement should be governed by
4 and construed under the laws of California. What is more, UMC reported roughly \$1.8 billion in
5 sales into the United States through its U.S. subsidiary, UMC Group (USA), which is located in the
6 Northern District of California. UMC recently noted that 43% of its foundry sales are in North
7 America, and those sales are primarily in the United States.

8 19. Because Defendant Jinhua is only indirectly owned by Fujian Province in the
9 People's Republic of China, it does not qualify as an agency or instrumentality of a foreign
10 sovereign. Accordingly, the Foreign Sovereign Immunities Act, 28 U.S.C. §§ 1602-1611 is not
11 implicated in this action. Moreover, the claims made herein are based upon Jinhua's commercial
12 activity carried out in the United States; upon its acts performed in the United States in connection
13 with commercial activity elsewhere; and upon its commercial activity outside the United States
14 which activity causes a direct effect in the United States.

15 20. Venue is proper in this District pursuant to 28 U.S.C. § 1391(b)(2) or, alternatively,
16 28 U.S.C. § 1391(b)(3).

17 **GENERAL ALLEGATIONS**

18 21. As Taiwanese prosecutors have recognized, Micron and its affiliates have
19 implemented a robust and effective system for controlling access to Micron's proprietary
20 information:

- 21 a. Micron stores its trade secrets on secure computers that require password-
22 protected access; such access is only supplied to employees and consultants
23 who have obligations of confidentiality to Micron including signed
24 confidentiality agreements and similar additional measures.
- 25 b. Micron requires password protection for both on-site network access and
26 off-site remote network access. Micron-issued laptops use industry-
27 standard encryption protections, such as Bit Locker, to encrypt laptop
28 content.

- c. All Micron personnel are required to protect Micron trade secrets according to Micron's Business Code of Conduct, and each Micron employee must certify adherence to that Code.
- d. Additional documents requiring that Micron's trade secrets be held in confidence include, but are not limited to, Micron employment agreements, Micron's employment handbooks (including Micron's Taiwan Employment Handbook), Micron's local work rules (including Micron's Taiwan Work Rules), and employee termination agreements.
- e. Micron personnel are required to complete a series of training courses addressing the confidentiality of Micron information. Such training courses include *Protecting Proprietary Information* and *Information Security at Micron*.
- f. Micron implements badge-controlled access to all Micron facilities.
- g. Micron routinely reminds employees of their confidentiality obligations and the importance of protecting trade secrets – including each time an employee accesses Micron's computer network.
- h. Micron marks documents with confidentiality notices such as "Micron Technology, Inc., Confidential and Proprietary" and "Micron Confidential / Do Not Duplicate."

22. Unfortunately, even those extensive protections could not prevent the concerted criminal conspiracy to steal Micron technology described in this complaint.

23. Beginning at least as early as 2015, UMC and the founders of Jinhua developed and set in motion a plan to induce former MMT employees to misappropriate Micron trade secrets and deliver those trade secrets to UMC, which UMC would then transfer to Jinhua. Under the UMC-Jinhua arrangement – to which they agreed in principle by January 2016 – UMC would provide Jinhua with advanced DRAM technology in exchange for \$300 million in R&D equipment, \$400 million in development fees, co-ownership of the resulting technology, and the potential for additional future licensing revenues.

24. However, as a semiconductor foundry with no advanced DRAM process, UMC had no realistic capability to fulfill its commitments under their agreement. Jinhua knew that UMC did not possess the technological resources to develop the promised technology by itself, and understood that the technology would be based substantially on Micron's DRAM designs and processes.

25. Under Chen's leadership, UMC targeted the Micron entity and fab that Chen knew best: Rexchip, now MMT. Chen had resigned from MMT on August 31, 2015, and officially joined UMC weeks later. In his role as Senior Vice President at UMC, Chen headed the NBD group and held ultimate responsibility for its three technology divisions, including PM2. With years at the helm of Rexchip and MMT, Chen had a wealth of knowledge on virtually every aspect of MMT's business – from technical details on Micron's DRAM design and process to Micron know how on manufacturing optimization, yield management, and product testing and quality. Chen quickly used his connections within MMT to recruit various MMT personnel with access to Micron trade secrets regarding many of the engineering and production challenges UMC's NBD group would inevitably face. Those recruits included Ho and Wang – both of whom would later work together on process integration problems at UMC's PM2.

26. Within weeks of Chen's official start date at UMC, Ho also resigned from MMT. Upon leaving, Ho took with him both electronic and hard copies of Micron's proprietary information, in clear and intentional violation of Micron and MMT's corporate policies. As Taiwanese authorities later explained, Ho then brought those trade secrets to UMC:

Because of his position as the section chief of MMT's mass production department, JT Ho logged into [MMT's] controlled server to access electronic records relating to the DRAM production process, which is MTI's trade secret ("Electronic Record A"). He copied the records to his own USB . . . and personal hard drive . . . for his reference any time during work, and possessed the hardcopy documents containing MTI's trade secrets . . . collectively referred to as "Paper Documents B[.]"

[//]

Subsequently on October 15, 2015 when JT Ho resigned from MMT, he did not destroy Electronic Record A and Paper Documents B in accordance with the agreements. JT Ho joined UMC in November 2015 and became the Process Integration1 Manager

under PM2 in April 2016. In January 2016, JT Ho was aware that UMC started to carry out the cooperation project with Jinhua and became MTI's competitor, and he was aware that the Electronic Record A and the Paper Document B he possessed could contribute to UMC's and Jinhua's mass production of DRAM in Mainland China. Instead of deleting or destroying Electronic Record A and Paper Documents B, JT Ho reviewed Electronic Record A using his UMC issued laptop . . . during the period from January 2016 to February 7, 2017 (the date when [Prosecutors] conducted the search). During this period, he also brought Paper Documents B to the PI1 office for use.¹

27. In January or February 2016, Ho began efforts to recruit Wang, MMT's Process Integration/Device Section Manager. With help from Ho, Wang submitted his résumé to UMC. Wang later visited UMC, where Rong interviewed him. UMC and Wang agreed that Wang would be hired with the same salary and benefits as he had at MMT, but that if Wang impressed Jinhua and took a job in Mainland China, he would sign another contract with Jinhua and earn substantially more. As Taiwanese prosecutors would later explain:

Subsequently on March 25, 2016, Kenny Wang received an Offer Letter from UMC, and informed JT Ho. . . . JT Ho thus started treating Kenny Wang as a team member of UMC and discussed . . . the issues that UMC had in developing DRAM technologies. Kenny Wang submitted his resignation letter to MMT on April 5, 2016 and left the company on April 26, 2016 upon the company's approval. From April 16 to 23, 2017, being fully aware that MTI and UMC are competitors in the development and manufacturing of DRAM and with the intent to use the information in Mainland China and to damage MTI's interest, Kenny Wang abused his authorization as the Product Quality Integration Manager by using MMT's laptop . . . to log on to MMT's server and to access MTI's electronic information relating to the method, technology, process and design of DRAM ("Electronic Record C," including a total of 931 files), which are protected trade secrets and copyrighted works. He stored Electronic Record C onto the abovementioned laptop, transferred it to a USB storage device . . . and then to two of his own laptops . . . and also uploaded it to his Google Drive²

28. In short, Wang spent his last days at MMT in a frenzied dash to pillage as much of Micron's confidential data as possible. On information and belief, Wang did so at the direction of one or more of his Co-Conspirators. Wang copied stolen files to one or more removable drives, including by using his work-issued laptop. He also uploaded the stolen trade secrets to a Google

¹ Indictment (Exs. 1 and 2) at 4.

² Indictment (Exs. 1 and 2) at 5.

1 drive. On information and belief, those stolen trade secrets stored on the Google drive were located
2 on servers located in the United States.

3 29. The trade secrets Wang stole covered the gamut of technologies necessary for UMC
4 to deliver its promised DRAM process to Jinhua. The stolen trade secrets included:

5 Information disclosing Micron's DRAM manufacturing and testing processes;

6 Wafer acceptance test files including test structures/data and layout regarding areas
7 destroyed in processing;

8 Test programming files;

9 Probe performance and parametric tests showing testing and yield;

10 Test results;

11 Process information for 30nm, 25nm, 20nm, 1Xnm process nodes;

12 Metallization process and layout;

13 Failure-analysis information;

14 Reticle specification files; and many others.

15 30. With full knowledge of his wrongdoing, Wang also took a number of steps to try to
16 deceive Micron and cover his tracks. Before returning his MMT-issued laptop, Wang attempted to
17 wipe his laptop of any incriminating evidence. On April 23, 2016, he performed Google searches
18 on such terms as "Clear computer data" and "Clear computer use records", and he accessed various
19 blogs on how to permanently erase a computer system. Later he downloaded and ran software
20 called "CCleaner" in an attempt to wipe his laptop. In addition, at his exit interview, on April 26,
21 2016, Wang lied and reported that he was leaving MMT to go to his hometown to join the family
22 business, when in fact he planned to formally join UMC only two days later.

23 31. Across the Taiwan strait, Jinhua laid the groundwork for its manufacturing
24 operations. On July 16 and 17, 2016, Jinhua held a public groundbreaking event for its DRAM
25 factory. The keynote speakers announced that the project was unique as the largest state-owned
26 production base for specialty DRAM products. They highlighted that, in its early stages, the Jinhua
27 project would mainly adopt technology obtained from UMC and that UMC had started talent
28 acquisition work in Taiwan and other regions. In effect, Jinhua acknowledged that its partner,

1 UMC, lacked the technical wherewithal for the project and would have to “acquire” the necessary
2 talent from other companies in Taiwan and elsewhere. Some participants expressed pessimism,
3 fearing that the officials running Jinhua might underestimate the gap between China’s
4 semiconductor industry and established semiconductor leaders with decades of investments in
5 DRAM technology. In the view of some, the gap was too great to overcome.

6 32. UMC and its Co-Conspirators, however, lost little time trying to narrow that gap
7 illegally – by incorporating the stolen Micron trade secrets. The Indictment issued by Taiwanese
8 authorities captures at least part of the misappropriation scheme in graphic detail:

9 Subsequently one day in July or August 2016, when attending the
10 PM2 morning meeting held by Leh-Tian Rong, Kenny Wang was
11 asked to stay in the meeting room with Ming-De Wei (the manager
12 of PI2) after the meeting and discuss the draft of the F32 DRAM
13 design rules presented by Wei. Because UMC has specialized as a
14 logic process foundry in the past and has no DRAM-related
15 designer’s manual, PI2 had to use a 65nm logic process designer’s
16 manual as its blueprint.

17 [//]

18 The abovementioned draft therefore lacked the necessary parameters
19 of “Cell,” “Array” and “Periphery” in the DRAM design rules.
20 Kenny Wang thus provided his comments on ion-implantation
21 process parameters (a key process to control doping in
22 semiconductor manufacturing). Leh-Tian Rong, albeit fully aware
23 that Kenny Wang left MMT nearly six months previously and that
24 the MMT information Kenny Wang possessed was likely obtained
25 illegally, asked Kenny Wang to compare the F32 DRAM design
26 rules of UMC with MMT’s materials (i.e. the DR25nmS design
27 rules), circle out the differences between the two, write down
28 [MMT’s] “stabilization data” on UMC’s draft design rules, fill in
necessary parameters relating to ion-implantation which cannot be
obtained through reverse engineering, and help complete the parts
including “Cell”, “Array”, and “Periphery” for Rong’s review, so
that UMC can complete the F32 DRAM design rules more quickly.

[//]

Two to three days after Kenny Wang received the said instructions
from Rong, he downloaded UMC’s final version of the logic IC
design rules, created columns for “Cell,” “Array” and “Periphery”
and filled in parameters for “width” and “space” on more than 10
pages of UMC’s final version of the design rules, using the
DR25nmS design rules as a reference. Kenny Wang quickly
completed the addition and revision of the parameters and handed in

1 the hard copies containing the parameters of the DR25nmS design
2 rules to Leh-Tian Rong in person.³

3 33. The Micron trade secrets that Wang stole proved invaluable to UMC's development
4 effort and critical to the timeline of the Jinhua DRAM project. As Taiwanese prosecutors have
5 concluded:

6 Rong handed [the hard copies] to Wei and told Wei to discuss them
7 with Kenny Wang. Wei, unaware of the foregoing, discussed the
8 stability . . . parameters of UMC's F32 DRAM design and other
9 parameters with Kenny Wang and Wu Kuo-How, an engineer of
10 PI2, and completed UMC's F32 DRAM design rules. Originally
11 UMC had no mask tape out team or ion-implantation specialists.
12 After Kenny Wang provided the DR25nmS design rules production
13 parameters, PI2 skipped processes such as the optical lithography
14 adjustment, etching and yellow light processes when developing the
15 F32 DRAM. The design rules were completed within only 2 months
16 and handed to the chip design manufacturer for the next step. Kenny
17 Wang was promoted to Device Manager in January 2017 for
18 excellent performance in reducing the time, costs, equipment and
19 labor in producing the design rules.⁴

20 34. These acts of misappropriation were encouraged and directed by UMC, Chen and
21 Jinhua. Indeed, in July 2016 – the same period in which Rong and Wang were actively
22 incorporating Micron's trade secrets into UMC's DRAM design rules – Chen is reported to have
23 made a presentation to the Hefei Economic Development Board, the governance board for a
24 Mainland development zone near where construction on Jinhua's DRAM project had recently
25 begun. During that presentation, Chen reportedly told one or more members of the Development
26 Board that he was using "Rexchip" (now Micron) technology at UMC. He reportedly admitted that
27 UMC itself preferred not to have its name attached to Chen's presentation because of concerns over
28 legal liability.

35. The Co-Conspirators took steps in furtherance of the conspiracy in the United
States as well. In June 2016, Jinhua posted material on the U.S.-based organization CASPA's
website advertising numerous Jinhua job openings in a variety of DRAM positions, including
process and design R&D, manufacturing, DRAM yield and process optimization, and DRAM

³ Indictment (Exs. 1 and 2) at 6.

⁴ *Id.* at 6-7.

1 testing. In October 2016, UMC and Jinhua sent a travelling delegation to Silicon Valley, led
2 personally by Chen, to recruit additional personnel for the DRAM project. Attended by upwards of
3 30 guests, the job fair was hosted by CASPA and sponsored by Jinhua, which had over ten
4 recruiters present. Because Micron is the only DRAM manufacturer in the world headquartered in
5 the United States, the Co-Conspirators knew or expected that some or all of their recruits would
6 come from Micron. On information and belief, the Co-Conspirators also knew and intended that
7 the recruitment of top talent in Silicon Valley would enable UMC and Jinhua to make optimal use
8 of Micron's trade secrets in the development and operation of Jinhua's DRAM project.

9 36. During the presentation, UMC and Jinhua emphasized that Jinhua's first fab would
10 start its pilot run by the fourth quarter of 2017, with mass production of its first DRAM product
11 beginning only one year later. This ambitious roadmap, which would tend to assuage any concerns
12 of job candidates that the project was distant or speculative, would not be possible without the use
13 of the stolen Micron trade secrets. In a shocking admission of their illegitimate intentions, the
14 slides UMC and Jinhua presented that day openly referred to the venture's first two DRAM
15 products as "F32" and "F32S", which are the exact internal codenames of DRAM products
16 developed and designed by Elpida (later acquired and owned by Micron), which had been in
17 production at the Rexchip fab (now Micron's Fab 16) where Co-Conspirators Chen, Ho, and Wang
18 all previously worked.

19 37. At or about the same time that UMC and Jinhua organized their recruiting trip to
20 California, they also continued to work together to poach additional MTT personnel in Taiwan for
21 Jinhua's DRAM project in China. Recruiting efforts by Sandy Kuo ("Kuo") – a UMC Project
22 Manager – provide a graphic example. Before joining UMC, Kuo had been the Manager of
23 Communication and Talent Strategy at MMT, at which time she had reported directly to Co-
24 Conspirator Chen (then, Site Director of MMT). After Chen left MMT for UMC, he recruited Kuo
25 to follow him to UMC in February 2016. In her MMT employment agreement, Kuo had
26 committed, for a period of 12 months after leaving MMT, "not to solicit, encourage or induce or
27 assist any third party to solicit, encourage or induce" other MMT employees to take employment
28 outside of MMT.

1 38. Kuo wasted little time in breaching her non-solicit agreement. In late 2016, she
2 actively helped Chen to recruit MMT employees for Jinhua – including S.Y. Chen, an MMT
3 Process Manager with responsibilities in the key process areas of “diffusion” and “wet etch.” In an
4 email to S.Y. Chen dated November 28, 2016, Kuo underscored how actively involved Jinhua was
5 in UMC’s improper recruitment efforts: “Stephen [Chen] would like to have more description of
6 your career in order to clarify your future position and provide to Jinhua investor from China side.”
7 Kuo even attached a “Jinhua Personnel Sheet” for S.Y. Chen to fill out. Copied on Kuo’s email
8 was Neil Lee, another former senior manager from MMT who had resigned within weeks of the
9 resignation of Ho. S.Y. Chen subsequently resigned from Micron to join UMC/Jinhua.

10 39. Meanwhile, UMC and Jinhua rewarded the individual Co-Conspirators for their
11 contributions to the illegal scheme. After incorporating Micron trade secrets into UMC’s DRAM
12 design rule, Wang was promoted to manager of UMC’s Device Department. On February 22, 2017
13 – shortly after Taiwanese prosecutors raided UMC’s NBD facility – UMC promoted and
14 transferred Chen to serve as President of Jinhua in Mainland China.

15 40. The Taiwanese criminal authorities launched their first of two raids on UMC’s
16 NBD facility on February 7, 2017. When the authorities arrived on site, UMC’s HR team alerted
17 Rong, who immediately instructed Wang and Ho to delete and remove all information on their
18 systems relating to Micron. Following Rong’s instruction, Wang and Ho handed anything
19 containing incriminating materials, including Wang’s cellphone, to a UMC assistant. The assistant
20 locked the materials in her personal locker and left the UMC facility with Wang’s cellphone.
21 Unbeknownst to Wang, the criminal authorities had previously obtained a search warrant and had
22 been monitoring Wang’s cellphone. When confronted with the fact that the criminal authorities
23 knew about his missing cellphone, Wang lied and said that the assistant borrowed his phone that
24 morning “because she wanted to see some photos.” At the criminal authorities’ insistence, UMC
25 instructed the assistant to return to UMC and hand over the phone, which she then did. The
26 assistant later confessed that she committed a crime in attempting to hide evidence. Because she
27 later cooperated, and because she was pressured into committing the crime by her UMC superiors,
28

1 the Taiwanese criminal authorities elected not to indict her (opting to issue a deferred indictment
2 decision instead).

3 41. UMC itself admits that Wang's conduct constitutes a crime under Taiwanese law.
4 In an act of apparent desperation, UMC filed *its own* criminal complaint against Wang, under the
5 theory that UMC was somehow the victim, rather than the beneficiary and mastermind, of Wang's
6 trade secret theft. The Taiwanese criminal authorities rejected UMC's complaint, ruling UMC was
7 no victim here.

8 42. Finally, on August 8, 2017, after nearly a year of investigation, the Taiwanese
9 criminal authorities indicted UMC, Rong, Ho, and Wang for conspiring to steal and misappropriate
10 Micron trade secrets in order to deliver that technology to Jinhua to enable it to illegally and
11 unfairly compete in the DRAM business.

12 43. The criminal investigation and subsequent indictments have not slowed the Co-
13 Conspirators' efforts. On May 11, 2017, Jinhua announced a partnership with Air Products, a U.S.
14 industrial gas supplier, for Air Products to provide gas supply for Jinhua's memory fab. Relying on
15 Jinhua's aggressive DRAM forecasts, which depend on incorporating Micron's trade secrets, Air
16 Products committed to build a state-of-the-art nitrogen plant to supply a broad range of ultra-high
17 purity gases to Jinhua. In July 2017, Jinhua announced its fab construction was ahead of schedule
18 and kicked off a second wave of recruitment. Even after UMC's indictment for trade secret theft
19 became public, UMC announced that it was moving ahead full steam with Jinhua and that it was on
20 track to complete the first stage of the project in 2018.

21 44. Micron seeks civil redress to the full extent of applicable law.

22 **COUNT I**

23 **Misappropriation of Trade Secrets under the Defend Trade Secrets Act**

24 **18 U.S.C. § 1836(b)**

25 45. Micron repeats, realleges and incorporates herein by reference the allegations of
26 paragraphs 1 through 44, inclusive, above.

27 46. The above alleged facts constitute actual and threatened misappropriation of
28 Micron trade secrets by UMC and Jinhua under 18 U.S.C. §§ 1836 and 1839.

1 47. At all times relevant to this Complaint, Micron owned the Micron trade secrets as
2 Micron was the entity in which rightful legal or equitable title to the Micron trade secrets is
3 reposed.

4 48. The Micron trade secrets include scientific, technical, economic, and engineering
5 information. The Micron trade secrets include plans, compilations, program devices, formulas,
6 designs, prototypes, methods, techniques, processes, procedures, programs, and/or codes, which are
7 tangible and/or intangible.

8 49. Micron has taken reasonable measures to protect the secrecy of the Micron trade
9 secrets.

10 50. The Micron trade secrets derive independent economic value, actual or potential,
11 from not being generally known to, and not being readily ascertainable through proper means by,
12 another person who can obtain economic value from the disclosure or use of the information.

13 51. The Micron trade secrets are related to and used in Micron products and services
14 sold or intended for use in interstate or foreign commerce.

15 52. Micron derives significant economic benefits from owning the Micron trade
16 secrets.

17 53. The Co-Conspirators improperly acquired, disclosed, used, appropriated, took,
18 carried away, concealed, copied, duplicated, downloaded, replicated, transmitted, sent, uploaded,
19 communicated, or conveyed the Micron trade secrets for the benefit of UMC and Jinhua. They
20 performed such acts in furtherance of the trade secret misappropriation in at least Taiwan, Mainland
21 China, and the Northern District of California.

22 54. The use of the Micron trade secrets by Co-Conspirators was without Micron's
23 authorization. Micron did not consent to their acquisition, disclosure, or use of the Micron trade
24 secrets.

25 55. The Co-Conspirators intended to convert the Micron trade secrets to the economic
26 benefit of one other than their owner, Micron.

27 56. The Co-Conspirators knew and intended that Micron, as the owner of the Micron
28 trade secrets, would be injured by their actions.

1 57. As a result of the Co-Conspirators' misappropriation of Micron trade secrets,
2 Micron has suffered actual damages in an amount to be proven at trial.

3 58. As a result of the Co-Conspirators' misappropriation, UMC and Jinhua have been
4 unjustly enriched.

5 59. Micron further pleads entitlement to a reasonable royalty to compensate Micron for
6 UMC's and Jinhua's misappropriation of trade secrets.

7 60. Micron is informed and believes, and thereon alleges, that Defendants'
8 misappropriation of Micron's trade secrets was willful and malicious based on the facts alleged
9 herein. UMC and Jinhua acted with a purpose and willingness to commit the acts alleged, and
10 UMC's and Jinhua's conduct was not reasonable under the circumstances. Micron is therefore
11 entitled to exemplary damages and attorney fees and costs. Micron further seeks exemplary
12 damages against UMC and Jinhua in an amount up to two times the amount of Micron's actual
13 damages according to proof under 18 U.S.C. § 1836.

14 61. The misappropriation of the Micron trade secrets has caused and will continue to
15 cause Micron irreparable and substantial injury and therefore cannot be fully redressed through
16 damages alone.

17 62. If the Co-Conspirators were permitted to continue to use and disseminate the
18 Micron trade secrets, Micron will be irreparably harmed and the economic damages to Micron will
19 be difficult to quantify. An injunction prohibiting UMC and Jinhua from further acquisition,
20 disclosure, use, and possession of the Micron trade secrets is necessary to provide Micron with
21 complete relief.

22 63. UMC's and Jinhua's wrongful conduct alleged herein by their misappropriation of
23 Micron's trade secrets will continue unless enjoined and restrained by this Court, and will cause
24 great and irreparable injury to Micron's business, and it could cause UMC and Jinhua to have
25 improper advantages, positions, and rights in the marketplace to Micron's detriment. Absent
26 injunctive relief, UMC's and Jinhua's further disclosure and use of Micron's trade secrets could
27 irreparably harm Micron.

COUNT II**Civil RICO****18 U.S.C. § 1962(c)**

64. Micron repeats, realleges and incorporates herein by reference the allegations of paragraphs 1 through 63, inclusive, above.

65. The Co-Conspirators formed an association-in-fact enterprise (the “Enterprise”) to engage in activities to affect interstate and foreign commerce by collaborating to misappropriate and use Micron’s trade secrets to manufacture advanced DRAM products in Mainland China for sale and distribution in China and around the world. The Enterprise operated by the Co-Conspirators includes UMC and Jinhua but is separate and distinct from either of them.

66. In furtherance of the Enterprise, the Co-Conspirators intended to and knowingly stole and, without Micron’s authorization, copied, downloaded, uploaded, photocopied, replicated, transmitted, delivered, communicated, or conveyed Micron’s trade secrets.

67. The Co-Conspirators also received, acquired, or possessed Micron’s trade secrets, knowing that they had been stolen, obtained, or converted without Micron’s authorization.

68. The Co-Conspirators intentionally engaged in these acts to benefit UMC and Jinhua, with the knowledge or intent that these acts would injure Micron. They did so at least in Taiwan, Mainland China, and the Northern District of California.

69. The actions of the Co-Conspirators abroad and in California constitute racketeering activities in violation of 18 U.S.C § 1832. This pattern of activity poses a threat of continuing because Jinhua and UMC are continuing to proceed with the production of DRAM products using Micron’s trade secrets.

70. UMC benefited from its employees’ and agents’ racketeering activities, and the racketeering activities of Chen, Rong, Ho, and Wang were committed within the scope of their employment while at UMC.

71. As a direct and proximate result of racketeering activities and violations of 18 U.S.C. § 1962(c) by the Co-Conspirators, Micron has suffered economic damages both

1 domestically and abroad, including, but not limited to, injuries in the Northern District of California
2 and in Boise, Idaho, in an amount to be proven at trial.

3 72. The aforementioned acts of the Co-Conspirators were done willfully, with malice
4 toward Micron, entitling Micron to treble damages, attorneys' fees, and costs.

5 73. The racketeering activities and violations of 18 U.S.C. § 1962(c) has caused and
6 will continue to cause Micron irreparable and substantial injury and therefore cannot be fully
7 redressed through damages alone. An injunction prohibiting UMC and Jinhua from further
8 acquisition, disclosure, use, and possession of the Micron trade secrets is necessary to provide
9 Micron with complete relief.

10 74. If the Co-Conspirators were permitted to continue to engage in their racketeering
11 activities and violations of 18 U.S.C. § 1962(c), Micron would be irreparably harmed and the
12 economic damages to Micron will be difficult to quantify.

13 **COUNT III**

14 **Civil RICO**

15 **18 U.S.C. § 1962(d)**

16 75. Micron repeats, realleges and incorporates herein by reference the allegations of
17 paragraphs 1 through 74, inclusive, above.

18 76. The Co-Conspirators have intentionally conspired and agreed to directly and
19 indirectly participate in the affairs of the Enterprise through a pattern of racketeering activities in
20 violation of 18 U.S.C § 1832, as described in Count II.

21 77. The Co-Conspirators knew that their actions constituted a pattern of racketeering
22 activities and agreed to those actions in furtherance of, and for the benefit of the Enterprise, as
23 described in Count II.

24 78. The actions of the Co-Conspirators constitute a conspiracy to violate 18 U.S.C
25 § 1962(c), in violation of 18 U.S.C § 1962(d).

26 79. As a direct and proximate result of racketeering activities and violations of
27 18 U.S.C. § 1962(d) by the Co-Conspirators, Micron has suffered economic damages both
28

1 domestically and abroad, including, but not limited to, injuries in the Northern District of California
2 and in Boise, Idaho, in an amount to be proven at trial.

3 80. The aforementioned acts of the Co-Conspirators were done willfully, with malice
4 toward Micron, entitling Micron to treble damages, attorneys' fees, and costs.

5 **COUNT IV**

6 **Trade Secret Misappropriation Under the California Uniform Trade Secrets Act**

7 **Cal. Civ. Code § 3426**

8 81. Micron repeats, realleges and incorporates herein by reference the allegations of
9 paragraphs 1 through 44, inclusive, above.

10 82. The Micron trade secrets constitute information, including compilations, programs,
11 devices, methods, techniques, or processes that derive independent economic value from not being
12 generally known to the public or other persons who can obtain economic value from the trade
13 secrets' disclosure.

14 83. Micron has taken reasonable measures to protect the secrecy of the Micron trade
15 secrets.

16 84. However, the Co-Conspirators intended to and knowingly stole and, without
17 authorization, disclosed, acquired, used, copied, downloaded, uploaded, photocopied, replicated,
18 transmitted, delivered, communicated, or conveyed Micron's trade secrets.

19 85. The Co-Conspirators acquired, used or disclosed Micron's trade secrets, knowing
20 that they have been stolen, obtained, or converted without Micron's authorization. The Co-
21 Conspirators intentionally engaged in these acts to benefit UMC and Jinhua, with the knowledge or
22 intent that these acts would injure Micron.

23 86. As a direct and proximate result of violations of Cal. Civ. Code § 3426.1 by the Co-
24 Conspirators, Micron has suffered economic damages both domestically and abroad, including, but
25 not limited to, in the Northern District of California and in Boise, Idaho, in an amount to be proven
26 at trial but exceeding \$75,000.

27 87. The aforementioned acts of the Co-Conspirators were done willfully, with malice
28 toward Micron.

88. As a result of UMC's and Jinhua's misappropriation, Micron has suffered actual damages and UMC and Jinhua have been unjustly enriched. Micron pleads in the alternative that, if it is determined that neither actual damages nor unjust enrichment is provable, then Micron is entitled to a reasonable royalty to compensate Micron for misappropriation of trade secrets by UMC and Jinhua.

89. Micron further seek exemplary damages against UMC and Jinhua in an amount up to two times the amount of Micron's actual damages according to proof under Cal. Civ. Code § 3426.3.

90. Micron is informed and believes, and thereon alleges, that Defendants' misappropriation of Micron's trade secrets was willful and malicious based on the facts alleged herein. UMC and Jinhua acted with a purpose and willingness to commit the acts alleged, and their conduct was not reasonable under the circumstances. Micron is therefore entitled to exemplary damages, attorney fees, and costs under Cal. Civ. Code § 3426.4.

91. The wrongful conduct and misappropriation of Micron's trade secrets alleged herein will continue unless enjoined and restrained by this Court, and will cause great and irreparable injury to Micron's business, and it could cause UMC and Jinhua to have improper advantages, positions, and rights in the marketplace to Micron's detriment. Absent injunctive relief, further disclosure and use of Micron's trade secrets by UMC and/or Jinhua would irreparably harm Micron.

PRAYER FOR RELIEF

WHEREFORE, Micron respectfully requests that the Court enter judgment against all defendants as follows:

- a. For actual damages in an amount to be proven at trial;
- b. Restitution, unjust enrichment, and disgorgement of profits from UMC and Jinhua resulting from misappropriation of Micron's trade secrets;
- c. Royalties;
- d. Entry of an order that restrains and preliminarily enjoins, and a Final Order that permanently enjoins, UMC, Jinhua, and their agents, servants, employees,

1 attorneys, and all persons acting in active concert or participation with them, from the
2 unauthorized acquisition, disclosure, use, duplication, or distribution of the Micron
3 trade secrets;

4 e. Exemplary and punitive damages;

5 f. Treble damages as provided in 18 U.S.C. §§ 1964(c) and 1964(d);

6 g. Reasonable attorneys' fees and costs;

7 h. Prejudgment interest;

8 i. For such other and further relief as the Court deems just and proper.

9 Dated: December 5, 2017

JONES DAY

11 By: s/ Randall E. Kay

12 Randall E. Kay

13 Counsel for Plaintiff
14 MICRON TECHNOLOGY, INC.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Micron demands a jury trial on all issues triable to a jury.

Dated: December 5, 2017

JONES DAY

By: s/ Randall E. Kay
Randall E. Kay

Counsel for Plaintiff
MICRON TECHNOLOGY, INC.